

Project Technician

Archbold Biological Station's Buck Island Ranch (BIR), and the Institute for Sustainability, Energy, and Environment at the University of Illinois (UIUC), Urbana-Champaign seeks a full time technician. Archbold operates a full scale working cattle ranch at BIR, which provides a unique platform for long-term agro-ecology research. The successful candidate will be supervised by Drs. Evan H DeLucia (UIUC; <https://www.life.illinois.edu/delucia/index.htm>) and Nuria Gomez-Casanovas (UIUC; https://www.life.illinois.edu/delucia/lab_group_files/Nuria.htm) and Dr. Elizabeth Boughton (BIR; www.archbold-station.org)

The overall goal of the project is to investigate the environmental sustainability of sugarcane for biofuel production. Our objectives are to: (1) Characterize the impact of sugarcane cultivation on the regulation of Greenhouse Gases (GHGs; CO₂, CH₄ and N₂O) compared to managed grazed pasture; (2) Quantify the efficiency at which sugarcane and pastures use water; and, (3) explore the impact of sugarcane cultivation on nitrogen and phosphorus losses versus pasture.

MAJOR DUTIES AND RESPONSIBILITIES

The successful candidate will assist with the maintenance of eddy covariance towers, and with sampling of field experiments at BIR in Florida, U.S. The balance of the technician's time will be spent in the laboratory for the following: analyzing soil, water, gas, and plant samples; preparing field supplies; maintaining field instrumentation related to this project (including eddy covariance, canopy and soil chambers); processing data. Depending on experience, there is also opportunity to assist with data compilation and analysis.

Required qualifications: A bachelor's degree in biology, environmental science, chemistry, or related field; basic computer skills (MS Word, Excel).

Preferred qualifications: Research experience in the field and in the laboratory related to biogeochemistry (e.g., trace gas flux measurements, soil and water sampling, gas chromatography, eddy covariance); experience working on farms and with farmers; experience working in subtropical and tropical sugarcane plantations and rangeland. Demonstrated knowledge of troubleshooting environmental monitoring equipment is desired.

The position is located at BIR, a 10,500-acre cattle ranch near Lake Placid, FL, with shared housing available on site. This is a full-time position, although the duties of the jobs may change as contract or grant turnover occurs. Competitive salary with full benefits. Applicants should send 1) a letter of application, 2) a resume or CV with relevant coursework and experience, and 3) names, phone numbers and e-mail addresses for three references to Dr. Nuria Gomez-Casanovas at ngomezca@igb.illinois.edu. Application deadline is Feb 15, 2020, and the position will remain open until filled. Contact Dr. Gomez-Casanovas via e-mail for more information.